	Application No.	Applicant(s)
Notice of Allowability	09/696,116	BOIVIE, RICHARD H.
	Examiner	Art Unit
	Benjamin A. Ailes	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *correspondence filed 31 December 2005*.

2. ☒ The allowed claim(s) is/are *9-12,15,16,19 and 20*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

Allowable Subject Matter

1.   Claims 9-12, 15-16 and 19-20 allowed.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Jose Gutman on December 1, 2006 and a second telephone interview held on

March 30, 2007.

The application has been amended as follows:

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

In the claims:

Please amend Claims 10, 11, 15, 16, 19 and 20 as follows.

Claims 1-8 (Canceled)

9. (Previously Presented) The method as defined in claim 10, wherein the determining and forwarding steps use a Small Group Multicast scheme.

10. (Currently Amended) A method for distributing web content objects across a network of information processing units and intermediate nodes, the method on an intermediate node comprising the steps of:

receiving a multicast packet;

determining one or more "next hops" that the multicast packet should be forwarded to;

forwarding one copy of the multicast packet to each of the "next hops";

sending one or more ACKs and/or NAKs or both between an intermediate node and another node of a network for reliably delivering a multicast packet to a destination information processing unit; and

repetitively executing the determining and forwarding steps for a plurality of one or more multicast packets.

11. (Currently Amended) The method as defined in claim 10, further comprising the steps of:

processing one or more ACKs and/or NAKs or both from a reliable multicast packet transmission; and

performing multicast packet retransmissions based on the processed <u>one or</u> <u>more</u> ACKs and/or NAKs <u>or both</u>.

12. (Previously Presented) The method as defined in claim 10, wherein the multicast packet comprises a small group multicast packet.

Claims 13-14. (Canceled)

15. (Currently Amended) A ~~tangibly embodied~~ <u>non-volatile</u> computer readable medium <u>or volatile computer readable medium, excluding network circuits,</u> including instructions for distributing web content objects across a network of information processing units and intermediate nodes, the ~~tangibly embodied~~ <u>non-volatile</u> computer readable medium <u>or volatile computer readable medium, excluding network circuits,</u> comprising instructions for:

receiving a multicast packet containing address information for a set of destinations;

determining the "next hops" for those destinations;

replicating the multicast packet for each "next hop";

sending <u>one or more</u> ACKs and/or NAKs <u>or both</u> between an intermediate node and another node of a network for reliably delivering a multicast packet to a destination information processing unit;

forwarding a copy of the multicast packet to each "next hop"; and

repetitively executing the determining, replicating and forwarding steps for each newly received multicast packet.

16. (Currently Amended) The ~~tangibly embodied~~ non-volatile computer readable

medium or volatile computer readable medium, excluding network circuits, as defined in

claim 15, further comprising the instructions for:

processing one or more ACKs ~~and/~~or NAKs or both from a reliable mulficast

packet transmission; and

performing multicast packet retransmissions based on the processed one or

more ACKs ~~and/~~or NAKs or both.

Claims 17-18 (Canceled)

19. (Currently Amended) An intermediate node for distributing web content objects

across a network of information processing units and intermediate nodes, the

intermediate node comprising:

a reception unit for receiving a multicast packet containing address information

for a set of destinations;

a determination unit for determining a "next hop" for each of the destinations;

a copying unit for replicating the multicast packet for each of the "next hops";

a processor for sending one or more ACKs ~~and/~~or NAKs or both between the

intermediate node and another node of a network for reliably delivering a multicast

packet to a destination information processing unit;

a forwarding unit for forwarding a copy of the mulficast packet to each of the

"next hops"; and

a repeater unit for repetitively executing the determining, replicating and

forwarding for a plurality of multicast packets.

20. (Currently Amended) The intermediate node as defined in claim 19, further comprising:

an acknowledgement unit for processing one or more ACKs and/or NAKs or both from a reliable multicast transmission; and

a retransmit unit for handling packet retransmissions based on the processed one or more ACKs and/or NAKs or both.

Claims 21-22 (Canceled)

Interview Summary

3.   A telephone interview was held on 1 December 2006 between Examiner Ailes and the representative for the applicant, Jose Gutman (#35,171). Mr. Ailes brought attention to claim language that does not particularly point out what is being claimed by use of "and/or" in claims 10, 11, 15, 16, 19 and 20. Mr. Ailes proposed an examiner's amendment to overcome a possible rejection under 35 USC 112, second paragraph. Mr. Gutman approved the claim amendments made in the above examiner's amendment.

4.   A second telephone interview was held on 30 March 2007 between Examiner Ailes and the representative for the applicant, Jose Gutman. Mr. Ailes brought attention to claim language in claims 15 and 16 that is not in compliance with office policy regarding what is deemed statutory subject matter. Mr. Ailes and Mr. Gutman discussed possible amendments to the claims in view of the specification and decided upon an examiner's amendment to overcome a possible rejection under 35 USC 101. Mr. Gutman approved of the claim amendments made in the above examiner's amendment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREW CALDWELL
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